IN THE CLAIMS

COMPLETE LISTING OF ALL CLAIMS, WITH MARKINGS AND STATUS IDENTIFIERS
(Previously presented claims showing deletions by ~~strikethrough~~ and additions by underlining)

This listing of claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

1. (previously presented) Process for the reverse transcription and/or amplification of a product of a reverse transcription of a pool of nucleic acids of a type (A) from a biological sample or an enzymatic reaction, said process comprising selectively suppressing the reverse transcription of at least one unwanted nucleic acid of type (A) and/or selectively suppressing the amplification of a product of a reverse transcription of at least one unwanted nucleic acid of type (A).

2. (previously presented) Process according to claim 1, wherein the nucleic acid of type (A) is mRNA.

3. (previously presented) Process according to claim 1, wherein the unwanted nucleic acid of type (A) is an mRNA which has a proportion of 20% or more of the total mRNA.

4. (previously presented) Process according to claim 1, further comprising the following steps

   a) carrying out a reverse transcription reaction of an RNA from a biological sample or a enzymatic reaction in the presence of at least one oligo-dT primer,

   b) optionally after step a) carrying out a cDNA second strand synthesis,

   c) optionally after step b) purifying the ds-cDNA while simultaneously depleting all the single-stranded nucleic acids from the reaction product of step b),

   d) optionally after step a) and/or b) and/or c) carrying out amplification of the cDNA.

5. (previously presented) Process according to claim 4, wherein steps a) and/or d) are carried out in the presence of at least one molecular species for selectively suppressing the reverse transcription of

at least one unwanted mRNA, while the molecular species prevents the reverse transcription of the unwanted mRNA, and/or for selectively suppressing the amplification of a product of the reverse transcription of at least one unwanted mRNA, the molecular species preventing the amplification of the single-stranded or double-stranded cDNA prepared from the unwanted mRNA.

6. (previously presented) Process according to claim 1 wherein in the reverse transcription reaction a reverse transcriptase with an intrinsic RNase H activity is used.

7. (previously presented) Process according to claim 1 wherein the biological sample is whole blood, muscle tissue or neuronal tissue, or it is a sample contaminated with whole blood, muscle tissue or neuronal tissue.

8. (previously presented) Process according to claim 7, wherein the biological sample is whole blood, and that the whole blood is taken up and/or stored in a stabilising reagent.

9. (previously presented) Process according to claim 8, wherein the stabilising reagent is contained in a blood sample vial and the blood is transferred into the stabilising reagent immediately after being taken.

10. (previously presented) Process according to claim 8, wherein the stabilising reagent contains a tetra-alkyl-ammonium salt in the presence of an organic acid.

11. (previously presented) Process according to claim 8, wherein the stabilising reagent contains at least one guanidine compound, a buffer substance, a reducing agent and a detergent.

12. (previously presented) Process according to claim 1, wherein the biological sample is whole blood, and that the unwanted nucleic acid of type (A) is globin-mRNA.

13. (previously presented) Process according to claim 4, wherein in order to purify a ds-cDNA in step c) first of all the nucleic acids obtained from step b) and/or those obtained from the optional step d) are bound in their entirety to a silica matrix and then the silica matrix is washed with a guanidine-containing washing buffer to deplete the single-stranded nucleic acids.

14. (previously presented) Process according to claim 13, wherein the silica matrix used consists of one or more silica membrane(s) or silica particles, particularly magnetic silica particles.

15. (previously presented) Process according to claim 13, wherein the guanidine-containing washing buffer contains guanidine isothiocyanate and/or guanidine thiocyanate in a concentration of 1 M to 7 M, preferably 2.5 M to 6 M and particularly preferably 3 M to 5.7 M.

16. (previously presented) Process according to claim 13, wherein the guanidine-containing washing buffer contains guanidine hydrochloride in a concentration of 4 M to 9 M, preferably 5 M to 8 M.

17. (previously presented) Process according to claim 5, wherein the molecular species is a DNA oligonucleotide and/or RNA oligonucleotide complementary to the mRNA or to one of the cDNA strands, or a corresponding oligonucleotide from DNA and/or RNA derivatives, or a corresponding DNA and/or RNA oligonucleotide containing modified or artificial nucleotides, quenchers or fluorophores.

18. (previously presented) Process according to claim 17, wherein the molecular species has a length of 10 to 60 nucleotides, preferably 12 to 30 nucleotides.

19. (previously presented) Process according to claim 5, wherein the molecular species is a nucleic acid analogue complementary to the mRNA or to one of the cDNA strands.

20. (previously presented) Process according to claim 19, wherein the nucleic acid analogue is PNA, LNA or GripNA.

21. (previously presented) Process according to claim 20, wherein the PNA has a length of 12 to 20 nucleotide analogues, preferably 13 to 16 nucleotide analogues.

22. (previously presented) Process according to claim 20, wherein the LNA comprises at least one nucleotide which is a 'locked nucleotide', and that the LNA has a length of 14 to 30 nucleotides, preferably 15 to 22 nucleotides.

23. (previously presented) Process according to claim 20, wherein the GripNA has a length of 12 to 30 nucleotide analogues, preferably 14 to 20 nucleotide analogues.

24. (previously presented) Process according to claim 17, wherein the molecular species binds in the 3' region of the mRNA or one of the cDNA strands.

25. (previously presented) Process according to claim 5, wherein a number of molecular species are used which are complementary to different regions of one or more specific mRNA(s) or at least one strand of one or more specific cDNA(s).

26. (previously presented) Process according to claim 5, wherein at least one molecular species is used which is complementary to a homologous region of different mRNAs or cDNAs.

27. (previously presented) Process according to claim 5, wherein the molecular species has at its 3' end a modification which prevents elongation from being initialized at the 3' end of the molecular species.

28. (previously presented) Process according to claim 5, wherein the molecular species is a ribozyme.

29. (previously presented) Process according to claim 28, wherein the molecular species is a hammerhead ribozyme or a hairpin ribozyme.

30. (previously presented) Process according to claim 28, wherein the ribozyme consists of RNA or an RNA derivative or embodies fusion products of such ribozymes.

31. (previously presented) Process according to claim 28, wherein the sequence of the ribozymes complementary to the unwanted mRNA or cDNA has a length of 12 to 30 nucleotides, preferably 15 to 25 nucleotides.

32. (previously presented) Process according to claim 5, wherein the molecular species is a DNAzyme.

33. (previously presented) Process according to claim 5, wherein the molecular species is a DNA oligonucleotide and the globin-mRNA embodies an alpha 1 globin-mRNA and/or an alpha 2 globin-mRNA, the DNA oligonucleotide comprising a sequence selected from the group consisting of:

    a) 5' CTC CAG CTT AAC GGT - phosphate group - 3' (SEQ ID NO. 1)
    b) 5' TAA CGG TAT TTG GAG - phosphate group - 3' (SEQ ID NO. 2)
    c) 5' TAA CGG TAT TTG GAG GTC AGC ACG GTG CTC - phosphate group - 3' (SEQ ID NO. 3).

34. (withdrawn) Process according to claim 5, wherein the molecular species is a DNA-oligonucleotide and the globin-mRNA embodies a beta globin-mRNA, the DNA-oligonucleotide comprising a sequence selected from the group consisting of:

    a) 5' GTA GTT GGA CTT AGG - phosphate group - 3' (SEQ ID NO. 4)
    b) 5' ATC CAG ATG CTC AAG - phosphate group - 3' (SEQ ID NO. 5)
    c) 5' GTA GTT GGA CTT AGG GAA CAA AGG AAC CTT - phosphate group - 3' (SEQ ID NO. 6).

35. (withdrawn) Process according to claim 5, wherein the molecular species is a PNA and the globin-mRNA embodies an alpha 1 globin-mRNA and/or an alpha 2 globin-mRNA, the PNA comprising a sequence selected from the group consisting of:

    a) N- CTC CAG CTT AAC GGT -C* (SEQ ID NO. 7)
    b) N- TAA CGG TAT TTG GAG -C* (SEQ ID NO. 8)
    c) N- GTC ACC AGC AGG CA -C* (SEQ ID NO. 9)
    d) N- GTG AAC TCG GCG -C* (SEQ ID NO. 10)
    e) N- TGG CAA TTC GAC CTC -C* (SEQ ID NO. 11)
    f) N- GAG GTT TAT GGC AAT -C* (SEQ ID NO. 12)
    g) N- ACG GAC GAC CAC TG -C* (SEQ ID NO. 13)
    h) N- GCG GCT CAA GTG -C* (SEQ ID NO. 14).

36. (withdrawn) Process according to claim 5, wherein the molecular species is a PNA and the globin-mRNA embodies a beta globin-mRNA, the PNA comprising a sequence selected from the group consisting of:

a) N- GTA GTT GGA CTT AGG -C* (SEQ ID NO. 15)
b) N- ATC CAG ATG CTC AAG -C* (SEQ ID NO. 16)
c) N- CCC CAG TTT AGT AGT -C* (SEQ ID NO. 17)
d) N- CAG TTT AGT AGT TGG -C* (SEQ ID NO. 18)
e) N- GCC CTT CAT AAT ATC -C* (SEQ ID NO. 19)
f) N- GGA TTC AGG TTG ATG -C* (SEQ ID NO. 20)
g) N- GAA CTC GAT GAC CTA -C* (SEQ ID NO. 21)
h) N- TGA TGA TTT GAC CCC -C* (SEQ ID NO. 22)
i) N- GGT TGA TGA TTT GAC -C* (SEQ ID NO. 23)
j) N- CTA TAA TAC TTC CCG -C* (SEQ ID NO. 24).

37. (withdrawn) Process according to claim 5, wherein the molecular species is an LNA comprising at least one nucleotide which is a 'locked nucleotide' and the globin-mRNA is an alpha 1-globin-mRNA and/or an alpha 2-globin-mRNA, the LNA comprising a sequence selected from the group consisting of:

a) 5' CTC CAG CTT AAC GGT - octanediol - 3' (SEQ ID NO. 25)
b) 5' TAA CGG TAT TTG GAG - octanediol -3' (SEQ ID NO. 26)
c) 5' GTC ACC AGC AGG CA - octanediol -3' (SEQ ID NO. 27)
d) 5' GTG AAC TCG GCG - octanediol -3' (SEQ ID NO. 28).

38. (withdrawn) Process according to claim 5, wherein the molecular species is an LNA, comprising at least one nucleotide which is a 'locked nucleotide', and the globin-mRNA embodies a beta globin-mRNA, the LNA comprising a sequence selected from the group consisting of:

a) 5' GTA GTT GGA CTT AGG - octanediol -3' (SEQ ID NO. 29)
b) 5' ATC CAG ATG CTC AAG - octanediol -3' (SEQ ID NO. 30)
c) 5' CCC CAG TTT AGT AGT - octanediol -3' (SEQ ID NO. 31)

d) 5' CAG TTT AGT AGT TGG - octanediol -3' (SEQ ID NO. 32)

e) 5' GCC CTT CAT AAT ATC - octanediol -3' (SEQ ID NO. 33).

39. (previously presented) Process according to claim 1, wherein the amplification comprises *in vitro* transcription.

40. (previously presented) Process according to claim 39, wherein the *in vitro* transcription is followed by a DNase digestion as well as purification of the cRNA.

41-53. (cancelled)